Gaza Strip’s Health Sector Under Israeli Military Aggression and Closure

May 2021
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Introduction

This report discusses the situation of the health care sector during the Israeli offensive on the Gaza Strip on May 10th, 2021, which continued for 11 days and resulted in the killing of 253 Palestinians, including 66 children and 395 women, and the injury of 1,948 others, whose injuries ranged between critical and minor conditions.

The report monitors the targeting and damages of medical facilities, the injury of medical personnel while on duty, and the impacts of that on the provision of basic medical services for the population of the Gaza Strip.

Also, the report exhibits the burdens on the medical system, especially in light of the increase in number of those injured during the Israeli bombardment on Gaza in hospitals and in Intensive Care Units (ICU). The report stresses that Gaza’s health care system is already on the verge of collapse due to the Israeli-imposed closure on the Strip over the last 14 years, which has been exacerbated by the repercussions of the Palestinian internal division.

It should be noted that the situation in the Gaza Strip has become catastrophically aggravated due to the closure of crossings, the entry ban on all humanitarian needs including medicines and medical supplies and devices, travel restrictions which has denied those wounded and seeking treatment in the West Bank hospitals (including hospitals in occupied Jerusalem, and /or hospitals in Israel). Moreover, the suspension of several health services provided by the ministry of Health (MOH) coincided with the ongoing and serious epidemiological situation in the Gaza Strip and the unprecedented
increase in number of those infected with the Covid-19 virus, especially during the period that preceded the Israeli offensive on Gaza.

Furthermore, the report monitors the impact of shortage of medicine and medical disposables of medical services provided by hospitals and medical centers, and on the health of the victims and patients that suffered as a result of the last Israeli offensive, especially those needing treatments for chronic diseases that are not accessible in the Gaza Strip.

This report is based on PCHR’s investigations, monitoring and documentation, in addition to information from the MOH. Interviews were also conducted by PCHR’s researchers with Gazan doctors, aiming to shed light on their experiences with the acute shortage of medicines and medical disposables in hospitals and medical centers; Most notable to services of oncology, maternal and child health, kidney, hematology, ophthalmology, cardiac catheterization, and mental health. PCHR researcher also recorded several testimonies of patients who suffer under the chronic shortage in medicine necessary for their treatment.
I. Health sector during the Israeli Offensive on the Gaza Strip

The Israeli offensive on the Gaza Strip has caused serious deterioration of the healthcare sector, as many health facilities were exposed to substantial damage and many medical personnel injured while on duty due to the Israeli bombardment. This had a negative impact on the provision of medical services for the population, and completely handicapped all laboratory services. Moreover, the targeting of the main roads and intersections by Israeli warplanes sustained severe destruction to pathways leading to hospitals, ultimately obstructing Palestinians’ movement, denying them access to medical services and hindered ambulances’ access to hospitals. This was also intensified with the Israeli authorities’ travel ban that was imposed on who suffer serious and chronic diseases patients that needed to exit the Strip to seek medical provision in the West Bank, occupied East Jerusalem and Israel.

- **Attacks on Healthcare Facilities**

Twenty-four healthcare facilities sustained severe damage due to the bombardment of nearby residential compounds; 11 of those facilities belong to the MOH (5 hospitals and 6 medical centers), and 13 others are non-governmental.

The following chart represents the health facilities that were targeted during the Israeli offensive on Gaza:
<table>
<thead>
<tr>
<th>Governorate</th>
<th>Health Facility</th>
<th>Material Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Gaza Strip</td>
<td>Indonesian Hospital</td>
<td>Severe material damage in the administration room</td>
</tr>
<tr>
<td></td>
<td>Beit Hanoun Hospital</td>
<td>Material damage due to Israeli bombardment near the hospital</td>
</tr>
<tr>
<td></td>
<td>Hala al-Shawa Clinic</td>
<td>Severe damage after targeting a nearby plot of land two times</td>
</tr>
<tr>
<td>MOH Facilities</td>
<td>Al-Shaimaa Health Center</td>
<td>Severe damage due to targeting the center’s surrounding with shells</td>
</tr>
<tr>
<td></td>
<td>Gaza City</td>
<td>Material damage due to Israeli bombardment near the clinic</td>
</tr>
<tr>
<td></td>
<td>Mental Health Clinic-west of Gaza City</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Al-Naser Hospital for children</td>
<td>Material damage due to Israeli bombardment near the hospital</td>
<td></td>
</tr>
<tr>
<td>Al-Dura Hospital for children</td>
<td>Material damage due to Israeli bombardment near the hospital</td>
<td></td>
</tr>
<tr>
<td>Al-Shifa Hospital</td>
<td>Roads leading to hospitals were targeted and ambulances’ movement was obstructed</td>
<td></td>
</tr>
<tr>
<td>Rafah</td>
<td>Quarantine center</td>
<td>Severe damage which obstructed efforts exerted by MOH to confront the outbreak of Covid-19 pandemic</td>
</tr>
<tr>
<td>Non-Governmental Health Facilities</td>
<td>Gaza City</td>
<td>PRCS headquarters</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Gaza City</td>
<td>Ambulance center belonging to PRCS</td>
<td>Various damage due to power outage at a critical time</td>
</tr>
<tr>
<td>Northern Gaza Strip</td>
<td>Hamad Bin Khalifa Al-Thani Hospital for Rehabilitation and prosthetics</td>
<td>Severe damage due to Israeli bombardment near the hospital</td>
</tr>
<tr>
<td>Gaza City</td>
<td>The Union of Health Care Committees (UHCC)</td>
<td>Severe material damage due to power outage after nearby area was targeted</td>
</tr>
<tr>
<td>Rafah</td>
<td>Kuwait Specialized Hospital</td>
<td>Various damage due to Israeli</td>
</tr>
<tr>
<td>Location</td>
<td>Name</td>
<td>Damage Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gaza City</td>
<td>Haider Abdel Shafi Center</td>
<td>Severe material damage after targeting security services headquarters located near the center</td>
</tr>
<tr>
<td>Northern Gaza Strip</td>
<td>Al-Karama Hospital</td>
<td>Material damage due to Israeli bombardment near the hospital</td>
</tr>
<tr>
<td>Gaza City</td>
<td>Patient's Friends Hospital</td>
<td>Material damage due to Israeli bombardment near the hospital</td>
</tr>
<tr>
<td>Beit Hanoun</td>
<td>The Union of Health Care Committees (UHCC)</td>
<td>Material damage due to Israeli bombardment near the center</td>
</tr>
<tr>
<td>Khan Yunis</td>
<td>The Union of Health Care Committees (UHCC)</td>
<td>Material damage due to Israeli bombardment near the center</td>
</tr>
<tr>
<td>Location</td>
<td>Organization</td>
<td>Damage Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Gaza City</td>
<td>Doctors Without Borders Center</td>
<td>Material damage due to Israeli bombardment near the center</td>
</tr>
<tr>
<td>Jabalia</td>
<td>Medical Relief Association</td>
<td>Material damage due to Israeli bombardment near the center</td>
</tr>
<tr>
<td>Gaza City</td>
<td>The Union of Health Care Committees (UHCC)</td>
<td>Material damage due to Israeli bombardment near the center</td>
</tr>
</tbody>
</table>

Israeli airstrikes on residential compounds resulted in the murder of two doctors working in the Gaza Strip hospitals and the injury of others; one of them sustained serious wounds. This has had negative psychological effect on the medical crews working in Gaza’s hospitals, as they were treating patients and the wounded under intense pressures. At the same time, they were also cut from contact from their own families, unable to contact them while on duty for long, continuous hours - sometimes days; and at times would find themselves in incomprehensible situations where the patients and corpses passing coming through the hospital doors were their own relatives, friends, and neighbors.
Basman al-‘Ashi, Administrative and Financial Director at Hamad Bin Khalifa Al-Thani Hospital for Rehabilitation and Prosthetics, gave the following statement to PCHR’s fieldworker:

“The hospital was off service during the Israeli offensive in May 2021, as it is located near the Gaza Strip coast, which is exposed to recurrent bombardment by Israeli warplanes and gunboats that target nearby governmental and civilian facilities.” Al-‘Ashi added that: “At approximately 20:15 on Sunday, 17 May 2021, Israeli warplanes targeted a civilian facility located 20 meters to the west of the hospital, which is located off al-Soudaniyia Shore. As a result, the hospital sustained severe material damage, as central air conditioners were damaged and the southern facade of the hospital, internal doors and rooms' ceilings were destroyed. During the first days of the offensive, the hospital administration decided to evacuate all patients from the hospital as situation in the surrounding area was very serious. Several days after the offensive ended, technical staff carried out maintenance work at the hospital, and work was resumed on 25/5/2021. Now, the hospital is receiving patients who need prosthetics."

Tal’at al-Masri, Administrative Director at Hala al-Shawa Clinic in Beit Lahia Housing Project in northern Gaza Strip, said to PCHR’s fieldworker that Hala al-Shawa Clinic that was dedicated by the MOH to provide medical services for patients infected with Covid-19, sustained severe damage during the offensive, so it was also out of service. He added that:

“At approximately 20:15 on Tuesday, 11 May 2021, Israeli warplanes targeted an agricultural land next to the clinic from the northern side. As a result, the clinic sustained severe damage, as its walls were destroyed and all its contents, including furniture and medical equipment, were burnt. Additionally, all Covid-19
vaccines and medicines kept in the clinic refrigerators became useless due to the bombardment. Since August 2020, the MOH dedicated Hala al-Shawa Clinic as a medical point in northern Gaza Strip to conduct Covid-19 testing and get its vaccine. The clinic losses were estimated at about $170,000, and the MOH temporarily dedicated Jabaliya Martyrs’ Clinic to provide Covid-19 services until conducting repairs at Hala al-Shawa Clinic.”

- Reduced Services by the Ministry of Health:

Medical services provided by MOH medical facilities for the Gaza Strip were either suspended or reduced due to Israeli bombardment near those facilities. In one instance, Israeli warplanes targeted a building located near the MOH central laboratory, so the area and the facility was automatically out-of-service. The laboratory was no longer able to carry out tests, such as Covid-19 tests. This had a negative impact on the efforts excreted by the MOH to curb the outbreak of the Covid-19 pandemic, especially as over 100,000 Palestinians were displaced from their homes due to the intensive airstrikes. Those displaced headed to schools and shelters, which lack personal protective equipment and social distancing. It is worth noting that before the Israeli offensive on Gaza begun, there was an increase in the number of those infected with Covid-19, as the total number of those infections was 109,763; 105,150 of them had recovered, 3,590 active cases and 1,023 deaths. Among the active cases in hospitals, there were 109 cases in need of special medical care, including 95 serious and critical cases.¹

¹ According to the MOH update on the epidemiological situation of the Coronavirus pandemic, 05 June 2021, for more information: [http://www.moh.gov.ps/portal/%f0%9f%87%b5%f0%9f%87%b8%d9%88%d8%b2%d8%a7%d8%b1%d8%a9](http://www.moh.gov.ps/portal/%f0%9f%87%b5%f0%9f%87%b8%d9%88%d8%b2%d8%a7%d8%b1%d8%a9)
Mo’tasem Salah, Director of Emergency Committee at MOH, said to PCHR’s researcher that that the MOH Headquarter and al-Rimal Martyrs’ Clinic sustained partial damage, and many injuries were reported; one of them was serious. He added that:

“At approximately 17:50 on Monday, 17 May 2021, while I was on duty along with my colleagues, Israeli warplanes targeted without prior warning a residential building adjacent to the Headquarter of the MOH. As a result, shrapnel and cement blocks scattered in the area. Also, Dr. Majed Salha was critically injured in his head due to the bombing and was taken to the Intensive Care Unit (ICU). Moreover, I sustained minor wounds due to shrapnel that caused minor burns over all my body. The Israeli bombardment caused partial damage in the Headquarter of the MOH and al-Rimal Clinic, so the MOH central laboratory was no longer able to carry out tests, especially Covid-19 tests.”

- **Obstructing Ambulances Movement**

Israeli warplanes launched several airstrikes targeting main roads and intersection, especially in Gaza City and in the northern Gaza Strip. This caused severe traffic restrictions and denied citizens’ access to hospitals and medical centers.

The Israeli Occupation Forces (IOF) targeting of vital streets and intersection in Gaza City and in northern Gaza Strip obstructed the movement of
ambulances, which took longer time due to rerouting to reach the main hospitals of al-Shifa Hospital in western Gaza City and the Indonesian Hospital. Al-Wehda Street was one of the most important and prominent roads that was bombarded in the latest attacks. Israeli warplanes carried out a massacre in the area by bombarding residential buildings over families in their intirties’ heads without warning. Al-Wehda Street is a main road that leads to al-Shifa Hospital in western Gaza Strip.

Also, infrastructure starting from al-Rimal Clinic intersection towards Palmera restaurant intersection and passing through Near East Council of Churches (NECC) Street towards al-Thailand restaurant on al-Thawra Street, where Palestinian Pension Agency was directly bombarded, sustained severe damage. The area, where the Palestinian Pension Agency headquarters is located, is considered a main intersection for vehicles’ movement towards the Gaza City northern neighborhoods. After targeting this intersection, Palestinians’ movement between neighborhoods was obstructed.

Furthermore, al-Sheikh Zayed neighborhood in eastern Beit Lahia was bombarded. As a result, the public street starting from al-Sheikh Zayed intersection towards the Indonesian Hospital was completely destroyed. Water and sanitation pipelines and electricity and communication networks sustained severe damage, creating extensive aftermaths issues. Furthermore, vehicles and citizens’ movement on these roads was obstructed.

- Denying Patients’ Travel for Treatment Abroad

When the Israeli offensive started on the Gaza Strip on May 11th 2021, the Israeli authorities closed Beit Hanoun “Erez” crossing, banning the travel of all
categories including patients referred for treatment abroad. After the offensive ended, the Israeli authorities declared that only the urgent “lifesaving” cases will be allowed to travel via the crossing; however, the reality on the ground says that the Israeli authorities refused to respond to dozens of permit requests applied by the Health Ministry’s Coordination and Liaison Department. These requested were for patients with serious diseases, whose treatment is not available at any of Gaza’s hospitals, and who had been referred for treatment in Israel, the West Bank, including occupied Jerusalem, and abroad. The Israeli authorities allowed the travel of only 13 patients out of the 191 requests applied by the Coordination and Liaison Department to the Israeli authorities between May 25th to 30th 2021.

PCHR received complaints from patients and injured persons during the latest Israeli offensive on Gaza, requesting the urgent intervention to guarantee their travel for treatment abroad after their health conditions deteriorated and the Strip’s hospitals’ incapability of providing them treatment. PCHR managed to obtain 6 permits for 6 patients and persons injured that are in critical conditions after sending appeals to the Israeli legal authorities and Public Prosecution. PCHR has also filed two petitions before the competent Israeli courts on banning the travel of a patient and a person injured during the offensive. PCHR is waiting for their response.

It should also be noted that there are about 8,700 cancer patients who are currently prevented from traveling to receive or complete their treatments that are not available in the Gaza Strip’s hospitals. The health conditions of those

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2 Press release issued by PCR on: Denying Patients Travel for Treatment in the West Bank Hospitals, on 24 May 2021.
patients require and relies on receiving chemical doses and radiotherapy periodically and in a consecutive manner. This has caused a major concern over the deterioration of cancer patients’ health conditions and danger to their lives, especially if they cannot travel immediately to complete their treatment protocols.³

³ Press release issued by PCR on: Cancer Patient Denied Travel Dies, Israel Continues to Deny Patients Travel for Treatment Abroad, on 02 June 2021.
II. Shortage of Medicines and Medical Disposables during the 2021 Israeli Offensive on Gaza

During the Israeli offensive on the Gaza Strip, main hospitals and medical centers suffered from an acute shortage of medicines and medical disposables. This is especially the case in emergency and operations departments such as ICUs which already suffer from a serious shortage of 32% of medicines and 24% of medical disposables before the offensive.

Furthermore, lists of essential medicines and medical disposables witnessed an acute shortage during the Israeli offensive on Gaza, as there was an urgent need for several medicines to save the life of those injured who arrived at the hospitals and their health conditions need urgent medical intervention.

Hundreds of civilians who were wounded during the latest Israeli offensive, flocked to Gaza’s hospitals, causing catastrophic pressures that deteriorated the health prevision. This was intensified as Israeli authorities prevented authorities in Gaza and international organizations from supplying Gaza Strip with necessary medicines and medical supplies during the offensive. Consequently, doctors suffered from such shortages, and faced great difficulties in the operation rooms. It was noted that victims’ bodies were torn into pieces and their limbs and heads were amputated from the impacts of the bombardments. Additionally, many of the cases had sustained laceration in their viscera and suffocated due to toxic gases. A large number of those injured sustained wounds in the upper parts of their bodies (head and neck), which proved that IOF deliberately used excessive force to kill defenseless civilians.
The offensive resulted in the murder of 253 Palestinians, including 66 children, 39 women and 17 elderly, and injured 1,948 others.⁴

Dr. Muneer al-Bursh, Director General of the Pharmacy Department in the Palestinian Ministry of Health - Gaza, stated to PCHR’s researcher that there was an acute shortage of medicines in the Gaza Strip, as 257 types of medicines and 285 types of medical disposables were out of stock. Al-Bursh emphasized that this shortage negatively affected medical services provided by Gaza hospitals. Also, emergency and surgery services at Gaza hospitals were in real danger, as there were no sufficient quantities of necessary medicines needed for cancer patients and those who suffer from blood disorders. Al-Bursh pointed out that the deficit rate at the emergency and surgery departments was 32%, while the deficit rates at Hematology and Oncology Department was 53%.

Al-Bursh added that the repercussions of the crisis on the health services are unimaginable, especially in the light of the real and urgent need for many types of medicines to promote the MOH’s capabilities to curb the outbreak of the Covid-19 pandemic; and in the light of the Israeli offensive on Gaza which inflicted hundreds of casualties; dozens of them in critical health conditions, receiving treatment at the ICU. Al-Bursh affirmed that the shortage of medicines has extreme implications on the health conditions of those injured during the Israeli offensive and directly threatens their lives.

The persistent shortage of medicines and medical disposables further complicates the situation at hospitals departments, most prominently at centers that serve emergency, surgery, cancer, and blood disorders services, as

⁴ An interview conducted by PCHR’s fieldworker with Dr. Medhat Abbas, Director General at the Ministry of Health in Gaza, on 25/5/2021.
well as medical disposables needed for cardiac catheterization, open heart surgery and colostomy.

- **Shortage of the essential drugs list**

The shortage of medicines continues in the MOH central warehouses, as categories of drugs at zero stock\(^5\) comprise 256 out of 516, with a 50% deficit rate, while the number of categories that are sufficient for less than 3 months has reached 74.\(^6\)

**Table (2): Total number of items of essential medicines’ list distributed according to the shortage of the basic services.**

<table>
<thead>
<tr>
<th>Service</th>
<th>Essential medicines list items’ number</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>Zero stock</td>
<td>Items that last for three months</td>
</tr>
<tr>
<td>Emergency operations and intensive care</td>
<td>149</td>
<td>47</td>
<td>25</td>
</tr>
<tr>
<td>Primary health care</td>
<td>141</td>
<td>95</td>
<td>14</td>
</tr>
<tr>
<td>Cancer and blood diseases</td>
<td>64</td>
<td>34</td>
<td>12</td>
</tr>
</tbody>
</table>

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\(^5\) Zero items: types of medicines that are at zero stock in the MOH warehouses.

<table>
<thead>
<tr>
<th>Service</th>
<th>Available</th>
<th>Used</th>
<th>Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health and nerves</td>
<td>42</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Immunology, Epidemiology and Genetic Diseases</td>
<td>42</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Mother and child health</td>
<td>28</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Kidney and hemodialysis</td>
<td>23</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>20</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Radiology and diagnostics</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>516</strong></td>
<td><strong>256</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

Negative effects resulting from the shortage of medicines in the Ministry of Health’s stocks in Gaza are increasing, with a 32% deficit rate on patients who receive emergency and operations services. In addition to the shortage in the cancer and blood diseases’ medicines, with a 53% deficit rate, resulted in increasing the patients’ sufferings to obtain their medicines and incur extra expenses despite their dire economic conditions, in light of the ongoing closure imposed on the Gaza Strip and the state of emergency due to Covid-19 pandemic.
• **Shortage of medical disposables:**

Medical disposables are imperative for work across all hospital departments, without which the provision of the basic services to patients are restricted or completely halted. This shortage poses immediate threats, especially in emergency and intensive care departments. Medical disposables at zero stock reached 285 items out of 853 (33% deficit rate), in addition to 60 items sufficient for less than 3 months.
Table (3): Total number of essential medical disposables distributed according to the shortage of the basic services.

<table>
<thead>
<tr>
<th>Service</th>
<th>Essential medical disposables list items' number</th>
<th></th>
<th>Items sufficient for three months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>Zero stock</td>
<td></td>
</tr>
<tr>
<td>Emergency operations and intensive care</td>
<td>390</td>
<td>73</td>
<td>20</td>
</tr>
<tr>
<td>Cardiac catheterization and open-heart</td>
<td>194</td>
<td>129</td>
<td>15</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>151</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>General disposables</td>
<td>90</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>31</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Kidney and hemodialysis</td>
<td>23</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Radiology and diagnostics</td>
<td>22</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Dental</td>
<td>21</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Ileostomy surgery</td>
<td>21</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>853</strong></td>
<td><strong>285</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
Cardiac catheterization and open-heart services are the most effected from the shortage of essential medical disposables at governmental hospitals, with a 66% deficit rate. While the shortage in essential disposables of ileostomy services reached a 50% deficit rate.\(^7\)

### Essential medical disposables items deficit

<table>
<thead>
<tr>
<th>Service</th>
<th>Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac catheterization and...</td>
<td>66%</td>
</tr>
<tr>
<td>Dental</td>
<td>62%</td>
</tr>
<tr>
<td>Ileostomy</td>
<td>50%</td>
</tr>
<tr>
<td>Kidney and hemodialysis</td>
<td>48%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>54%</td>
</tr>
<tr>
<td>Emergency operations and...</td>
<td>24%</td>
</tr>
<tr>
<td>Radiology and diagnostics</td>
<td>18%</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>16%</td>
</tr>
<tr>
<td>General disposables</td>
<td>12%</td>
</tr>
</tbody>
</table>

**III. Repercussions of the shortage of medicines and medical disposables on basic medical services**

The shortage of medicines and medical disposables caused severe impacts on a number of patients in the Gaza Strip, and put their lives at risk, such as lack of the Medicated Milk which can cause mental disorders for infants who are in need, but cannot be supplied of it. Another example is the shortage of kidney transplant medicines, which can lead the body to reject the transplanted kidney thus resulting in the failure of the kidney transplant operation altogether. Also, persons with heart diseases suffer a lack in all items of medical disposables

\(^7\) Ibid.
related to urgent medical interventions that they need during diagnostic and therapeutic catheterization operations, such as stents and balloon catheters. Moreover, the shortage of blood-related medicines for thalassemia and hemophilia patients is threatening their lives. As well as cancer patients who go through excruciating hardships to obtain their medicines daily, this shortage constitutes a humanitarian catastrophe that threatens many patients’ lives.

- **Emergency, operations, and intensive care:**

Emergency and intensive care units in Gaza’s hospital are suffering a critical shortage of drugs and medical disposables, which pose a serious threat to the lives of thousands of patients; especially those with multiple injuries resulted from direct bombing, who require quick medical interventions, availability of medical disposables and appropriate medicines. The most prominent zero stock items in the emergency departments are solutions intended to sterilize and clean open wounds, shortage in surgical tools needed for multitudes of operations. The Israeli occupation banned the entry of medical supplies during the Israeli aggression on the Gaza Strip.

Zero stock items in the emergency and intensive care departments reached 47 out of 149 essential items, with a 32% deficit rate, while zero stock of medical disposables reached 73 out of 309 essential items, with a 24% deficit rate. Additionally, the items that would last for 3 months reached 25 medicinal items and 20 medical disposables, which poses serious threats to the lives of the patients, and sheds light on the deterioration of many medical services within the emergency, operations, and intensive care departments.
One of the threats in the ICU is the shortage of IVIG medicine, which is essential for children with “Gillian Barre” disease. It’s shortage poses serious threats to their health, and going without it can resulted in disability or complete loss of movement. Hospitals also suffer from a persistent shortage of the "Intravenous Luminal" drug, which has no alternative, and is the main choice for treating cases of neonatal spasms in the ICU.  

- **Orthopedic Surgery:**

Orthopedic departments in governmental hospitals in the Gaza Strip witnesses a permanent shortage of some medical disposable items, as 24 out of 151 essential items are out of stock, with a 16% deficit rate, while only 13 items are sufficient for the upcoming three months. These departments include many required specialized surgeries such as hand, shoulder, and elbow surgeries, joint replacement, spine and incidents surgeries, and pediatric orthopedics. These departments suffer from limited specialized medical staff and weak capabilities, which is why hospitals resort to transferring many of such cases to receive treatment outside the Gaza Strip – which was also the case during the Israeli offensives on the Gaza Strip and injuries that referred to the hospitals during Great March of Return casualties.

Doctors working in such departments have no choice but to make multiple uses of most surgical tools. For example, doctors have been obliged to cut from existing platinum implants and skewers to meet the required size for these materials in surgical operations.

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8 PCHR researcher interview with Dr. Amal al-Sherbacy, al-Nasr Children Hospital Pharmacy on 18 April 2021.
Orthopedic departments suffer from a shortage of medical solutions and antibiotics, especially during the Israeli offensive on the Gaza Strip, where wounds would be contaminated and uncovered due to direct targeting of civilians; approximately 8 liters of solutions are needed to sterilize such wounds. Doctors are forced to surgically intervene on more than one occasions in attempts to not amputate the limbs of some cases who are suffering from severe inflammation. Also, some types of pain relievers that patients must take immediately after orthopedic surgeries are not available, which oblige patients to purchase these pain-relievers from private pharmacies on their own expense.

- **Primary health care:**

54 governmental primary health care centers are available in the Gaza Strip, distributed among its five governorates, which provide many primary health services, most prominent: follow-up of pregnant women, birth planning, children’s health follow-up by giving them their vaccinations, reproductive health, primary care for chronic diseases such as blood-pressure, diabetes, heart and asthma, endocrine diseases, neurological diseases, and other diseases such as rheumatism, and dermatology.⁹

Those centers suffer from severe shortage of medicines, as 95 out of 141 essential medicinal items were out of stock, with a 67% deficit rate, while the medicinal items that supposed to be sufficient for three months are only 14 items. That negatively affected the services provided by these centers, especially on children and patients with chronic diseases, as they face obstacles

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⁹ PCHR interview with Dr. Adnan al-Borsh, Consultant Orthopedic Surgeon, on 25 May 2021.
in obtaining their medicines due to the permanent inaccessibility. Such shortage deteriorates the patients’ health conditions, especially poor patients who cannot afford the prices of medicines that are too high for them to purchase from private pharmacies.

- **Cancer and blood diseases:**

Cancer patients in the Gaza Strip suffer catastrophic conditions in light of the severe shortage of essential drugs and medical disposables needed to continue their treatment, while the Israeli occupation continues imposing restrictions on the entry of new medical devices and laboratory materials necessary to conduct examinations of cancer patients. These challenges deprived cancer patients from receiving treatment and medical services equivalent to their serious health conditions.

Cancer and blood diseases patients also suffer acute shortage of the essential drugs needed for their treatment, with a 53% deficit rate (34 out of 64 zero stock items). The most important medicines for cancer patients that are out of stock are: Herceptin, Glivec, Taxol, and Neupogen. Additionally, there is shortage in medical supplies needed for cancer patients' treatment, with a 40% deficit rate, as devices used in radiotherapy are unavailable in Gaza’s hospitals, in addition to diagnostic devices, including PET, CT and Thyroid scan.\(^{10}\)

Due to constant shortage of medicines and medical supplies, the MOH refers cancer patients for treatment abroad. However, they were denied access to

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\(^{10}\) PCHR interview with Dr. Zyad al-Khozondar, Oncologist, on 25 April 2021.
treatment due to the Israeli closure, the tight restrictions on travel via Beit Hanoun (Erez) Crossing, and restrictions imposed due to the outbreak of the Covid-19 pandemic since April 2020.

At least 14,000 cancer patients are suffering in the Gaza Strip; 47% males and 53% females. Breast cancer is the most commonly diagnosed cancer among females, constituting 32.2%, while colorectal cancer is the most common type of cancer among males, constituting 13.2%. Despite the shortage of specialized doctors and nurses, medicines, medical supplies, and diagnostic devices, Gaza hospitals provide medical services and treatment for cancer patients to the best extent possible.

(E. ‘A.) (66), a widow living in Sheikh Redwan neighborhood, west of Gaza, stated that she was diagnosed with breast cancer in 2017, and underwent a surgery to remove the tumor (Mastectomy) in 2018. About her sufferings to obtain her treatment she stated to PCHR’s field worker that:

“In 2017, I was diagnosed with breast cancer, so I underwent to chemical treatment program in al-Rantisi Hospital in the Gaza Strip, until the tumor was removed in 2018. Since I removed the tumor, I was in need to immune-boosting medications and some nutritional supplements; as calcium and alpha, which are dispensed to me through the oncology pharmacy at al-Rantisi Hospital. Most often, the injection to raise my immunity, which consider as the most important medicine that my body needs, becomes out of stock, so I am obliged to buy it on my own expense, despite the high prices and the deterioration of our economic conditions, I need 3-4 injections monthly after every chemotherapy session. I also need radiotherapy sessions which are not available in the Gaza Strip, and I cannot
travel to receive treatment outside as I do not hold a Palestinian ID card, so I am committed to what the doctors prescribed in hormonal therapy permanently, which requires the availability of hormonal medicine, calcium and alpha, which are medicines that I should not stop taking, and when there is any shortage in them, I must purchase from other pharmacies at much higher prices, if I am lucky to find any.”

(A. B.) (50), married and living in Beit Lahia, north of the Gaza Strip, stated that he had a colon cancer, and about his experience in the shortage of medicine he said to PCHR’s fieldworker:

“In November 2019 I travelled to Egypt to receive treatment after I was injured during the Great March of Return and Breaking Siege (GMR). Physicians told me that I have a colon tumor, which led me to stay in Cairo for a year to continue my treatment at Palestine Hospital; part of the expenses was covered by the Palestinian Authority. After the spread of Covid-19, I returned to Gaza and continued my treatment at Rantisi Hospital, where the required chemical doses are not always available, so I was referred to Haya Specialized Hospital. Due to that, some medical items that I used to take from Rantisi Hospital’s pharmacy such as Tramadol, ointments for ulcers for my external colon pouch, stomach medicines and nutritional supplements, which are not available. Most of the times, they gave us reduced quantities and that comes after several weeks of postponement which led our health conditions to further deterioration.”

- Mental health and neurology:
In Gaza, there is only one governmental hospital for mental health, in addition to 6 clinics distributed across the Gaza Strip’s governorates; all these clinics have extreme shortage of medical stocks for patients who suffer from chronic diseases, especially those who suffer from schizophrenia, depressive disorder, and obsessive-compulsive disorder (OCD). Mental health hospital and other governmental clinics suffer from medicinal shortage with a 52% deficit rate in the essential medicines for mental and neurological patients. 22 out of 42 mental health medicines’ items are out of stock, the most prominent of which is “PROZAC” as there is an urgent need for 120 thousand pills to be available in the stocks, as it is an effective needed drug for persons with depression, where the shortage of it affects patients and lead them to commit suicide or criminal cases within society.

The number of patients who regularly visit the six mental health clinics in the Gaza Strip is almost about 3,000/each, where any shortage in the medicinal stock constitutes a disaster, as some drugs are not available in pharmacies, even if they were available they are expensive, which deprives poor patients from obtaining their drugs with high prices and that cause serious health obstacles and setbacks in treatment, which negatively affect society as a whole.¹¹

(A. H.) (48), a tailor living in al-Naser neighborhood in Gaza, suffering from chronic depression and obsessive-compulsive disorder (OCD), after he was exposed to a trauma 30 years ago, said to PCHR’s fieldworker that:

“Long years ago, I am suffering from excessive nervous convulsions and depression with OCD, resulted in taking several kinds of medications that I

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¹¹ An interview conducted by PCHR’s researcher with Dr. Rozalin al-Qishawi, Head of Pharmacy Department at the General Administration of Mental Health, on 11 April 2021
receive from the mental health clinic, west of Gaza City. Since 2012, I am suffering from shortage of medicinal items that I need, which affects the quantity that the medical clinic dispenses to us and left me with no choice but to buy from private pharmacies, while in fact, my financial situation does not allow me to buy expensive medicines at the expense of my children. As a result, my mental health condition was deteriorated, the OCD returned and that negatively affected my friends at work, my family, and children by the nervous waves that I get when I am not taking my medicine. If I want to stabilize my chronic disorder, I must take “PROZAC” regularly, which is not available in the governmental clinic a while ago, and that resulted in starting my suffering with the OCD all over again.”

(H. S.) (52), living in Sheikh Redwan neighborhood in Gaza, stated that her husband and son are suffering from schizophrenia, neurological disorders, and OCD, and about her suffering with shortage of medicine she said to PCHR’s fieldworker that:

“Since December, essential medicines for my husband and son who are suffering from chronic mental disorders were not available. Nowadays, we cannot sleep for fear that dangerous things may be committed, so I keep going to the mental health governmental hospital in Gaza to obtain the required quantity of the essential medicines for my husband and son, that I hope to be dispensed soon. My husband and son are suffering from chronic mental disorders, and not taking the required medicine may push them to bite hands or using sharp tools to hurt others, latest of which happened when my husband was about to slaughter my son using a knife due to deteriorating his mental health condition for not taking his medicines, as we are not having enough
money to buy it from private pharmacies. Our economic situation is really
difficult, as our one and only source of income depends on what the Ministry of
Social Development dispenses for us every 3 months, which does not meet our
basic food and drink obligations. Additionally, we cannot buy the necessary
amount of medicine for my husband and son.”

- **Immunology, epidemiology, and genetic diseases**

A limited rate of patients are suffering from immune system, epidemics, and
genetic diseases in the Gaza Strip, who cannot afford the prices of medicines
which are too high for them in case they were not available in the Ministry of
Health’s stocks. Despite their limited numbers, they are already suffering from
a severe shortage of medicines with insufficient quantities, which put them in
pharmacological insecurity conditions, especially in chronic diseases that
require permanent treatment for every patient. Lack of this treatment leads the
patients’ health condition to deteriorate, as about 300 patients are suffering
from genetic disorders that affect the blood cells "Thalassemia". Over 8 months
ago, patients are lacking their essential medicines such as "EXJADE" and
"DESFERAL" which they must take for life, and its deficiency is a threat to their
lives. The interruption of taking these medicines leads to the accumulation of
iron in the body’s organs, especially in the heart, and increasing iron in the
pancreas leads to diabetes, and its accumulation in the liver leads to cirrhosis,
and when its disposition in the heart considered as one of the most prominent
death causes for Thalassemia patients.

Moreover, about 125 patients are suffering from rare genetic disorder
"hemophilia", as a result of the deficiency or absence of one of the coagulation
factors in the blood (proteins), and it mostly occurs among males; where the patient bleeds after infection for a longer period than normal people. Those patients need “FACTOR-8” and “FACTOR-9” medicines, where lacking these medicines leads to organs and tissues damage. The severity of the infection is defined by the amount of factors deficiency in the blood; the more it decreases the more severe the disease will be. However, when a patient suffers from a severe injury, he needs a quantity of medicine that may consume everything in the medical stocks, as these medicines are only available through the Ministry of Health due to their high prices\(^\text{12}\).

Zero stocks of essential medicines of immunity and genetic diseases reached 21 out of 42 items, with a 50% deficit rate, as doctors use reduced doses at intervals, which may cause life-threatening complications. In conjunction with the state of emergency to curb the spread of Covid-19, the patients’ health conditions deteriorated due to the difficulty to reach to hospitals for fear that they do not have sufficient immunity to cope with the virus infection.

(E. ‘A.) (24), living in Beit Lahia, north of the Gaza Strip, a graduate of Nursing Diploma, stated that after giving birth to her daughter “Sham” she discovered that she and her daughter had Hepatitis C virus (HCV), and about her suffering with shortage of medicine she said to PCHR’s fieldworker that:

“In September 2020, I underwent a caesarean section in al-Awda Hospital, north of the Gaza Strip, and gave birth to my daughter, Sham, who is 7 months

\(^{12}\) An interview conducted by PCHR’s researcher with Dr. Hani Ayyash, a hematologist at the European Gaza Hospital, on 25 April 2021.
old now. After 2 months of the delivery, I went to make the routine check-ups where physicians told me that I had HCV as a result of the insufficient sterilization of the operation tools in the hospital, then I went to check-up my daughter, and she was diagnosed positive. After referring to a specialist, he shocked me by saying that there are no medicinal items for HCV’s in the Ministry of Health’s stocks or even in the private pharmacies, as its availability will be part of the required quantity at high prices. According to the doctor, we must commit in taking the medicine continuously for 3 months without any disruption. Thus, I barely provided the required quantity through one of the travelers who came from Egypt to Gaza, hoping that I am recovering and will not need more medicines. Now the treatment of my daughter who has the HCV remains, as the doctor told me that her treatment will start when she finished her first year, fearing that the required medicines to treat her will not be available when she needs.”

(Sh. S.) (32), a government teacher, married and living in Khan Yunis, south of the Gaza Strip, said that he suffers from Hemophilia, and about his suffering with shortage of medicine he said to PCHR’s fieldworker that:

“Since I was born, I am suffering from Hemophilia “genetic disease”, which makes me careful while moving, as any hit in my body causes me to bleed, and that bleeding can only stop by taking medicine that increases blood clotting factors. Several years ago, I started to feel a serious shortage of medicine, despite its deficiency is a crisis for hemophilia patients which threat their lives. One of the tough experiences I went through was when I had internal bleeding
in my digestive system, where medicine at home or in the hospital’s stock was not enough to stop me from bleeding, so I resorted to media appeals after my health condition deteriorated and my blood test reached 8. Then they gave me the necessary quantity of “FACTOR” medicine until the bleeding was stopped. Hemophilia patients are threatened by health problems resulting from the shortage of medicine, most prominent of which are joint damage particularly the erosion of the knee joint, as when we need to perform a joint replacement operation, a large amount of medicine must be available to stop the bleeding. This is what makes us live with our pains, as when we suffer from dental pain, we cannot extraction the teeth, but bear the pain instead. In addition to the inability to provide the required amount of medicine that would stop any bleeding resulting from medical intervention. Our medicines are very expensive and only available through the Ministry of Health’s stocks and lacking to our medicines always threatens our lives.”

Sh. S. (32), a governmental schoolteacher married and living in Khan Younis in southern Gaza Strip, has hemophilia, which is an inherited blood disease, and talk about his tough experience with the shortage of medicine to PCHR’s fieldworker:

"Since I was born, I have suffered from the inherited hemophilia and must be extremely careful as a simple bump might cause a bleed, which needs a medication that increases the concentration of clotting factors to control stop it. Few years ago, the medicine I take has been limitedly available and sometimes out of stock although it is so essential for hemophilia patients and its absence may threaten their lives. During my tough experience with medicine shortage, once I
had an internal Gastrointestinal (GI) bleeding, and there was not enough medicine at the house or the hospital. Following appeals to the media as my health deteriorated and my blood was 8, I could have enough quantities of my medicine which stopped the bleeding. We the hemophilia patients are always exposed to health problems due to medicine shortage; including joint damage and particularly the knee joint wear, and when we need a surgery to replace a joint, we need a lot of medicine to stop the bleeding, thereby forcing us to live with our pains. We also suffer toothaches that require tooth extraction, but we bite down on the pain due to shortage in the medicine needed to control the bleeding due to the medical intervention. These medicines are really expensive and only available at the MOH’s stocks, but not permanently in a way that always puts our lives at stake."

- Immunology, Epidemiology and Genetic Diseases

Only a limited percentage of the Gaza Strip's patients suffer Immune system and genetic diseases. These patients suffer from high medicine prices particularly when they are not available at the MOH's stocks. Although these patients are a small percentage of critically ill patients, they still suffer immensely due to the acute shortage of medicine, making them insecure, particularly for patients with chronic diseases that require taking medication constantly. Lacking such medicine worsens patients' conditions as over the last 8 months, around 300 patients with thalassemia have run out of essential medicines such as "EXJAD" and "DESFERAL", which are both prescribed for life, and any shortage could threaten these patients' lives. If they do not take their medicine, iron overloads in their organs, practically the heart. Moreover, When there is an iron overload in the pancreas, it causes diabetes while its overload
in the liver may cause cirrhosis. Moreover, excess iron in the heart is the main cause of death for thalassemia patients.

Moreover, around 125 patients suffer "Hemophilia," a rare inherited disorder resulting from low level or absence of proteins called clotting factors in the blood; most common in males. People with hemophilia bleed for longer time, more than normal persons and needs medicines for low levels of factor VIII (8) or factor IX (9); thus, shortage of these medicines could lead to damage in any of the organs and tissues. The severity of hemophilia is determined by a number of factors in the blood. The lower the amount of the factor, severe the disease will be. When a patient for example has the severe form, he would need a huge quantity of medicine that would run out of the stocks, noting they are only available at the MOH for its high price.¹³

The number of zero-stock medicines of immune and genetic diseases reach 21 of 42 types; constituting a 50% deficit, forcing doctors to reduce patients' doses and give them infrequently that may lead to complications and threaten their lives. Moreover, due to COVID-19 state of emergency, patients' health deteriorated due to having difficulty to access their hospitals and fearing for their lives, as they do not have the sufficient immunity to combat COVID-19 if infected.

E. 'A. (24), a nursing diploma graduate from Beit Lahia in northern Gaza Strip, said that after she delivered her baby girl "Sham", she found that she and her baby has Hepatitis C virus. She talked to PCHR's fieldworker about her suffering with the medicine shortage:

¹³ PCHR's interview with Dr. Hani 'Ayyash, a Hematologist at Gaza European Hospital on 25 April 2021.
"In September 2020, I had a C section at al-‘Odah hospital in northern Gaza Strip and delivered my baby girl Sham, who is now 7 months old. 2 months after my delivery and while I went for a routine checkup, I found that I have Hepatitis C, which was initial and resulted from improper sterilization of the operation tools at the hospital. As a result, I tested my daughter as well and she was positive. After talking with the doctor, he surprised me that the medicine needed to treat my diseases ran out of the MOH’s stocks and all other pharmacies and if it is available, it will be in very small quantities and very expensive. According to the doctor, I must take the medicine constantly for 3 months, so I ordered the needed doses of the medicine from Egypt and asked one of those returning to Gaza to bring it to me as the medicine there is easily accessible, hoping that I will need more medicine and recover. Meanwhile, my daughter’s treatment should start after she becomes 1 year old, according to the doctor, but I am afraid that I will not find the medicine needed to treat her at the time."

- Maternal and Child Health

There are two governmental children’s hospitals in the Gaza Strip: al-Naser Children’s Hospital and al-Dora Hospital in addition to al-Rantisi Specialist Hospital for the treatment of cancer, kidney diseases and other diseases. These hospitals suffer acute shortage of medicine and medical disposables, which affect the health condition of inpatients and outpatients as well as the children with rare inherited diseases. Shortage of therapeutic milk is a tragedy for these sick patients and their families due to the limited quantities available at the MOH’s stocks, thereby forcing the families to buy the rest quantity from other pharmacies in high prices in case they were available. Thus, running out of this milk would threaten children’s lives and may lead to death.
Anemia affects around 38% of pregnant women and 73.3% of children; thus, any shortage in supplying dietary supplements, including iron and folic acid for women as well as vitamins A and D for children under 3 years old would affect the mental development of infants and Cognitive development of children during school years. Moreover, it would affect women’s reproductive health.¹⁴

There is acute and serious shortage in the PKU testing material, which is necessary for testing newborns within the first week of their birth to diagnose Phenylketonuria disease and determine the level of amino acids necessary for brain growth and formation and cognitive development. This test diagnoses the disease, so children can be treated, if proven infected, by giving them a special type of milk, which is not always available. Any delay in the diagnosis or testing of newborns would cause serious complications to their health that may lead to brain damage, neurological problems such as seizures and tremors, growth problems, and intellectual disability. According to MOH’s statements, the test is done only at the MOH’s Central Laboratory as all samples (around 5000-6000 monthly samples) are collected from medical facilities all over the Gaza Strip.

There is a shortage of medicines used to treat children with kidney diseases, antibiotics used for children with epilepsy and insulin pens for children with diabetes. Moreover, there is insufficient quantities of vitamin K that is important for children, and the types of medicines at zero stock reached 17 out of 28 used in treating children’s diseases, with a high deficit of 61%, while 4 types of medicines only suffice for three months.

¹⁴ PCHR’s interview with Dr. Eman al-‘Araj, Pediatric Chronic Diseases Department’s pharmacy at al-Rantisi Hospital, 11 April 2021.
E. Z. (29), a farmer living in al-Barn al-Sameen area in Khan Younis in southern Gaza strip, has a 2-year-old daughter, Lana, and one-year-old Suhaib who suffers from therapeutic milk and potassium shortage that would affect their health. He said to PCHR’s fieldworker that:

"Two years ago, Lana was born. Two weeks later, she was admitted to the ICU and stayed there for a month as she accepted neither breastfeeding nor formula feeding. After tests, it was found that she needs therapeutic milk "Similac Isomil", which is the only one that fit her. The pharmacy at al-Rantisi Hospital provides it and in case it is not available, I buy it from pharmacies outside although it is expensive and rarely found. Later Suhaib was born and I went through the same hard experience a month after his birth. He refused breastfeeding and had seizures, so he was admitted to the ICU 3 times sporadically for a total of 8 months. I am now doing the necessary procedures to refer him to the West Bank’s hospitals for diagnosis and treatment, until then, the milk should be available constantly whatever the price is. Sometimes, I get half the quantity from the hospital and search for the rest at the pharmacies despite my poor economic conditions. Moreover, if my son does not take the milk, it would lead to Hepatomegaly, increase sugar in blood and decrease potassium levels. What I also faced while staying with my children at the hospital is lack of many tests at the hospital, so I had to do them in private laboratories that are very expensive and increase the burden. I also had to pay daily transportation expenses from Khan Younis to Gaza for we do not have a children's hospital in the southern Gaza Governorate."

J. D. (43), a mechanic living in a rented house in Tal al-Hawa in Gaza City, told PCHR’s fieldworker about his 4-yrat-old Sham, who has suffered
since birth from digestive problems and frequent hypoglycemia (low blood sugar levels), and talked about his experience with medicine shortage:

"Since birth, my daughter Sham was admitted to the neonatal intensive care unit. After doing blood tests, they showed recurrent hypoglycemia so she was referred to the West Bank’s Hospitals, which were also unable to diagnose her case and was so referred to the Israeli hospitals. Doctors said she has a rare disease that may not be treated and she will need constant medical care. After the PA’s decision to suspend coordination with the Israeli occupation, her treatment was suspended at the Israeli hospitals. I am trying hard to buy the medication prescribed by doctors as she needs therapeutic milk for her pancreas and under skin injections, which are not always available at the governmental pharmacies, noting that buying this medication cost a lot as it is only available upon request. She needs 12 cartons that include 80 injections monthly, but the governmental pharmacies only provides half the quantity and I buy the rest. Moreover, she needs a feeding tube, which cost ILS 1500, every 4 to 6 months, and it is not available at the MOH’s stocks, so I buy it after ordering it from Israel."

- Kidney and hemodialysis

The shortage of Erythropoietin injections will endanger the lives of 850 kidney and hemodialysis patients. These injections are important for all renal failure and dialysis patients, and any failure to provide these injections for kidney patients may cause anemia and affect the heart and their general health. These injections are among the categories that at zero stock because it is always consumed and only available in limited quantities that do not suffice the
demand for more than few days. Normally, the available quantity of these injections at the MOH warehouses normally should cover the demand for a period of 3-6 months. The medicines used for treating kidney diseases are 23 types, including 8 at zero stock with a 35% deficit while the medical disposables are around 23 types, including 11 at zero stock with a deficit of 48%. Any shortage in these medicines would put at great danger the lives of 850 patients with kidney diseases and around 500 patients who have not reached the dialysis stage yet rendering them in constant need of blood units.

'A. D. (22), a Literature Graduate from al-Azhar University and living in al-Zaitoun neighborhood in Gaza City, said that she underwent a kidney transplant abroad and talked about her experience with medicine shortage with PCHR's fieldworker:

"I got a kidney transplant abroad back in 2014 as I had suffered a lot with my kidneys and did dialysis periodically like all other patients in Gaza until my kidney transplant went successfully. It is well known that kidney transplant patients should take daily doses of specific medicines such as Cyclosporine, CellCept and Cortisone and must not in any way and not for once stop to guarantee the transplant success. In order to evade the recurrent crisis of medicine shortage, I always try to keep some tablets so I can use it later when the medicine is not available. Sometimes, I contact with other transplant patients to borrow medicine such as CellCept, especially that these medicines are not available in pharmacies due to their high prices and only available at the Ministry of Health. Any medicine shortage is a tragedy for us that may cause transplant rejection, and that's what I always fear."

15 PCHR's interview with Dr. 'Abdullah al-Qishawi, a nephrologist, on 25 April 2021
- **Ophthalmology**

There is only one governmental eye hospital in the Gaza Strip and located in Gaza City along with ophthalmology clinics and departments at hospitals in the southern Gaza Strip, which refer serious cases to the main hospital in al-Nasser neighborhood in Gaza City. The types of medicines prescribed in the field of ophthalmology recorded a deficit of 60%: 12 out of 20 types of medicines used to treat eye diseases while 14 out of the 31 medicine disposables recorded a deficit of 45%. It should be noted that the number of patients who visit the eye hospital’s departments reached around 1600.

Currently, the eye hospital almost completely suspended its services due to the outbreak of COVID-19 in addition to having acute shortage of medical disposables and devices as well as some types of medicines. The hospital provides emergency services and medications for chronic and serious diseases while the shortage of medicines and medical disposables reached worst levels where patients of urgent and serious cases are affected. If some cases like patients with eye pressure disease "Glaucoma" or retinal diseases "Retinal detachment" were not treated promptly and took the needed medication, they might become blind or suffer low vision.¹⁶

Moreover, many important devices at the hospital are broken and there are no alternatives available, affecting the surgery scheduling and thereby requiring patients' referral to hospitals abroad despite having professional medical staff to perform eye surgeries inside the hospitals. Thus, the hospital refers abroad an average of 30 patients with retinal diseases in a month. Meanwhile, patients with corneal diseases wait for years due to lack of cornea banks in the Gaza

¹⁶ PCHR’s interview with Dr. Akram Nassar, a consultant ophthalmologist, on 11 April 2021
Strip and shortage of medicines, forcing many patients to buy medicines in unaffordable high prices.

M. M. (67), from Jabalia, suffers eye health issues and lost his vision. He talked to PCHR's fieldworker about his experience with medicine shortage:

"After I was released from the Israeli prisons in 1994, I did a comprehensive checkup and found out that I have many health issues and diseases, including eye pressure and problem in the right eye nerve. The doctor prescribed me a permanent medication that included eye drops that were available at the eye hospital in Gaza City and periodically dispensed every 2 weeks. However, since 2011, my suffering began due to the drops shortage and not dispensed as it used to be; thus, I got worse and lost my vision. I also have diabetes and hypertension and had many cardiac catheterizations."

A. M. (50) from al-Mughraqah in central Gaza Strip stated that she is a mother of 7 children with glaucoma and permanently in need for drops. She talked to PCHR’s fieldworker about her harsh experience due to the medicine shortage:

"My suffering began in 1995 when I discovered that all my sons and daughter have eye diseases after checkups at the hospital. My sons, Mohammed (30) and Mahmoud (25), have genetically-inherited glaucoma, according to the doctors. Meanwhile, my 3 sons, Khaled (22), Amir (9) and Jamal (20) and 2 daughters, Kamelah (17) and Jihan (15,) have problems with the eye nerves and glaucoma and should frequently use the "Timolol" and “IOP” drops, as the doctor in the Eye Hospital told me. However, over the past five years, we have suffered a lot due to the shortage of medicine that shall be dispensed for my children, so we had to buy
the rest from pharmacies. As my husband is unemployed, we cannot afford buying the required quantity of drops due to our poor conditions. As a result, my children suffer due to the intraocular pressure and go through unbearable pains. Unfortunately, my son Khaled lost his right eye completely as he could not undergo the surgery and due to medicine shortage. In order not to repeat this harsh experience, I always go to the government clinic to ask about the available drops to get some."

- **Cardiac catheterization and open heart surgery**

The Gaza Strip records an increase in the number of patients with hypertension and diabetes, causing different heart diseases that may trigger angina or lead to vascular diseases and strokes. Heart diseases are the leading cause of death in the Gaza Strip.

Medical procedures for heart conditions are considered urgent and sudden where time is important to save the patient's life; thus, any shortage of medical disposables at government hospitals poses imminent danger to lives of hundreds. Many patients lost their lives due to lack of medical consumables, which patients instantly need such as heart stents and balloons.¹⁷

Acute shortage of medicines and medical supplies and devices used to prevent and treat diseases is one of the leading reasons of death in the Gaza Strip. There is shortage of clot-buster drugs at heart departments in addition to lack of other medicines due to their high prices. Moreover, there is shortage of medicines used to treat heart attacks and anginas as well as shortage of medical supplies.

¹⁷ PCHR’s interview with Dr. Mohammed Habib, Cardiology Consultant and Head of the Department of Cardiology and Cardiac Catheterization at al-Shifa Hospital on 04 May 2021
used to maintain heart stents. It should be noted that heart departments at the governmental hospitals only perform diagnostic catheterization while patients are referred for therapeutic catheterization to private hospitals in Gaza or the West Bank due to acute shortage of different types of stents and balloons.

Medical disposables used to treat heart diseases at zero stock reached 129 out of 194 types with 66% deficit in addition to shortage of devices used to diagnose and treat heart diseases, as there are only six devices for cardio catheterization; 2 at the governmental hospitals and 4 at private hospitals.

A. H. (50), from al-Maghazi refugee camp in the central Gaza Strip, has chronic heart diseases; as a result, he had a stenting surgery at a private hospital. He talked with PCHR's fieldworker about his experience with medicine shortage:

"My suffering started with heart problems in 2020 when the COVID-19 state of emergency was declared so I was afraid to go to governmental hospitals, where medicine and capabilities needed for heart surgeries are not sufficiently available, including stents. I was referred to al-Hayah Hospital, which is a private hospital, to have a therapeutic cardio catheterization, due to which doctors placed stents. Doctors prescribed medicines to take frequently, but I can hardly get these medicines due to the crisis of medicine shortage at the governmental clinics, forcing me to buy expensive medicines like Crestor for triglycerides and Concor to manage heart rate, that are not always available at the governmental or UNRWA clinics in al-Maghazi."
Conclusion and recommendations

PCHR emphasizes the dangerous healthcare situation in the Gaza Strip following the Israeli offensive of May 2021, and fears of further aggravation of the suffering of those wounded and dealing with chronic diseases due to the acute shortage of medicines and medical disposables. PCHR expresses its concerns over the ongoing violation of Gaza patients' right to obtain treatment safely and promptly. Thus, PCHR calls upon:

- International community to pressure the Israeli occupation authorities to fulfil their legal obligations towards the Gaza Strip with its capacity as an occupying power, which should assume the responsibility for providing medical supplies to the Gaza Strip and allowing the travel of patients according to Articles (55) and (56) of the 1949 Fourth Geneva Convention.
- Both the Ministry of Health in Ramallah and Gaza to coordinate with each other in order to provide the medicines and medical disposables that are not sufficiently available in the Gaza Strip.
- International community and relevant organizations to provide medicines and medical supplies, which patients, who under abject poverty, need in the Gaza Strip.
- International community to force Israel to stop the collective punishment policy imposed on the people of the Gaza Strip, including closure of crossings for patients and humanitarian cases, that may lead to serious deterioration of civilians' enjoying their economic and social rights.